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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/534,814	03/22/2000	Duane Charles Gates	2328-023 RI	9066

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EXAMINER

PASCHALL, MARK H

ART UNIT	PAPER NUMBER
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3742

DATE MAILED: 01/19/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

09/534,814

Applicant(s)

GATES, DUANE CHARLES

Examiner

Mark H. Paschall

Art Unit

3742

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 01 December 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-58 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-58 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)             | 4) <input type="checkbox"/> Interview Summary (PTO-413)                     |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)    | Paper No(s)/Mail Date. _____  |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____   | 6) <input type="checkbox"/> Other: _____                                    |

***Reissue Applications***

Claims 39-58 are rejected under 35 U.S.C. 251 as being based upon new matter added to the patent for which reissue is sought. The added material which is not supported by the prior patent is as follows:

In claim 39 the new matter is listed on lines 7-13 and comprises describing the coil as having interior, intermediate and peripheral portions and also describing different magnetic fluxes for these different coil portions. Note that the original disclosure and claims are silent as to any discussion of magnetic flux. These same limitations are likewise found in claim 45 on lines 10-16, in claim 51 on lines 10-17 and claim 54 on lines 8-15. In claims 40, 46-50 new matter is disclosed as the new limitations setting forth that the interior coil comprises plural radially and circumferentially extending turns, with the intermediate portion not including a complete turn. Note that the original disclosure is drawn to a coil having a first and a second segment in series, and not the three segments now claimed. In claims 51 and 56 the new matter listed respectively in lines 15 and 16 and in lines 14 and 15 comprises the term, "the lead having at least a portion that is straight". Claims 40, 46, 51 and 54 set forth the new matter comprising, "(a) does not include a complete turn, 9b) is substantially less than a complete turn, and (c) includes a lead connected to ends of the turns of the interior and exterior portions." No mention is made of this new matter in the

original patent and disclosure. Applicant is required to point out specifically , where the original disclosure mentions the new matter limitations set forth above.

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claims 39-58 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter that was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. The new matter comprises inclusion of a coil comprised of three segments, an interior portion, an intermediate portion and a peripheral portion. The original specification described only a coil having two segments in series. The new claims set forth language describing a variation of magnetic flux relative to the coil segments. However, the original disclosure makes no mention of the term magnetic flux, and only mentions variation of coil current to effect a plasma having uniform plasma characteristics. Claims 40, 46, 51 and 54 contain the term, "does not include a complete turn", in reference to the intermediate portion of the coil description. The original disclosure makes no reference to this limitation, and only mentions the coil as having , "at least one arcuate portion", see column 3 line 57, and see claim 8 defining, ' and an arcuate conductor having at least one turn". No mention is made of the term , "complete turn". The complete turn would indicate a 'coil" portion, and not a

connector portion. No mention is made of the terms in claims 40,46,51 and 54, which sets forth the configurations of 9a), (b) and (c) in the previous paragraph, defining use of less than a complete turn and defining a straight portion of the intermediate coil portion, (also new matter).

### ***Claim Rejections - 35 USC § 102***

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 39 and 45 are rejected under 35 U.S.C. 102(b) as being clearly anticipated by Bignell (3,586,905). Note column 4 , lines 41-51, which denote a coil magnetic field intensity which is greater at the coil ends than the coil intermediate portion.

### ***Double Patenting***

The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

Claims 1-58 are rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claim 1-45 of U.S. Patent No. 6,268,700 (Holland et al). Although the conflicting claims are not identical, they are not patentably distinct from each other because although slight differences in the claim language and grammar the patent to Holland et al teaches a plasma chamber having gas to be converted into a plasma, a coil positioned to couple RF energy into the gas to form the plasma and a coil having three portions, an interior and an intermediate, in conjunction with a peripheral portion. The magnetic flux density of the interior and the peripheral portions, exceeds the magnetic flux density of the intermediate portion, as set forth in the instant claims (see column 6 lines 34 to column 7 line 4). Note terminology describing the intermediate portion as having less than a complete turn. As set forth, the current density is obviously greater in the interior and the peripheral portions than in the intermediate portion.

Claims 1-58 are obviously directed to the same invention as that of claims 1-45 of commonly assigned patent 6,268,700 (Holland et al).

***Response to Arguments***

In view of the incorporation of the Bignell reference, set forth in the above rejection of the claims, and in view of the previous and new, "new matter" rejections the claims are withdrawn from final rejection and treated accordingly. This is a non-final rejection

Applicant's arguments filed 07-23-02 have been fully considered but they are not persuasive. . The rejection under new matter stands. The declaration from Dr. Patrick has been reviewed and noted in the file, and addressed in the prior office actions. However, new matter, as pointed out in the previous office actions has been added to the application and Applicant has failed to point out line and page, where the basis for this new matter originates in the original disclosure. Note that the original disclosure described the coil as having first and second segments in series, not the three individual portions claimed. Applicant has argued that these new matter inclusions are inherent features, as does Dr. Patrick. However they are not considered inherent. Applicant should note that the coil specifics such as the planar relation of one turn of the coil to another and the spatial and planar locations of one coil portion to another have not been disclosed. How then can a patentable result of a more uniform etching occur without such disclosures . Applicant should note the new matter rejections above and set forth the page and line in the original disclosure which denote such new matter limitations.

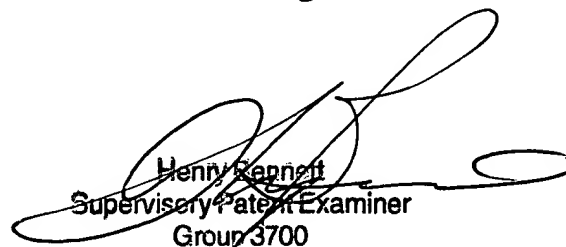
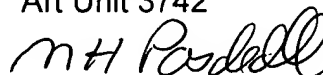
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Mark H. Paschall whose telephone number is 703 308-1642. The examiner can normally be reached on 7am - 3pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Robin Evans can be reached on 571-272-4777. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Mp

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